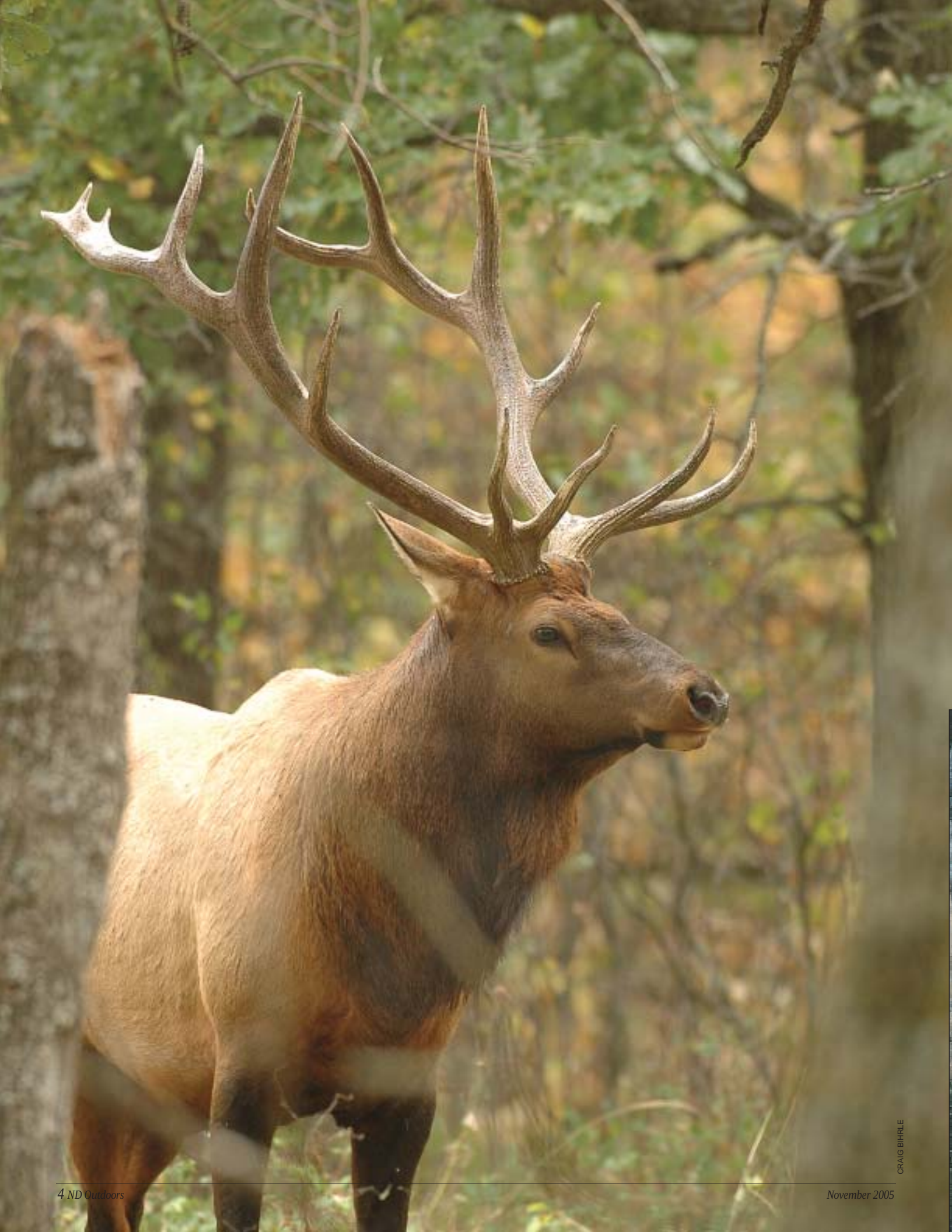


CRAIG BIHRLE

Smoke in the Wind

Managing Elk in North Dakota

By Ron Wilson

It's interesting that you can have hundreds of wild, roaming animals – big animals at that, standing nearly 5 feet at the shoulder and weighing anywhere from 700-1,000 pounds – and rarely see one.

For some, pedestrians and hunters alike, that's the case with Rocky Mountain elk in North Dakota.

With white-tailed deer so abundant in the state, and often so easy to spot, some people envision that's the way it ought to be with elk, said Bruce Stillings, North Dakota Game and Fish Department big game management biologist, Dickinson. "Many people have this whitetail mentality with elk, until they come to the badlands and try to find one," he said. "We'll get elk hunters into our check stations who've hunted a half-day and say it's more than they bargained for and head home."

It's not often you'll spy an elk in North Dakota while driving section lines. "You have to be willing to go out and walk the rough country, and many people do it and just love it," Stillings said. "Those are the hunters who are successful."

Even in the South Unit of Theodore Roosevelt National Park in southwestern North Dakota, where elk are numerous compared to free-roaming animals outside the fences, it's not a given you'll see elk. Park officials estimated the South Unit's elk population, prior to calving in 2005, at about 600 animals. "A lot of folks have this perception of elk in national parks, and that they should be able to walk right up to them," said Mike Oehler, TRNP wildlife biologist. "These elk in North Dakota, however, are like smoke in the wind. Once they're disturbed, they're gone. They're cagey animals."

When explorers Lewis and Clark traveled through North Dakota two centuries ago, there were plenty of elk, their numbers eclipsed only by bison and pronghorn, said Bill Jensen, Department big game management biologist. Elk were common throughout the state until the late 1870s when railroads brought homesteaders. Elk, the newcomers quickly learned, were good to eat and relatively easy to kill, and subsistence and market hunting resulted in the animal's rapid extirpation or disappearance from the

Left: Historians say only a handful of elk remained in North Dakota after 1900.
Below: Weather, food and water are not limiting factors in an expanding elk population in North Dakota, but landowner tolerance and space are.

HAROLD UMBER

"These elk in North Dakota, however, are like smoke in the wind. Once they're disturbed, they're gone.

Elk DNA Findings

It was once believed – and some people still likely hold to the notion – that elk in parts of northeastern North Dakota are a so-called Manitoba subspecies. DNA research in the late 1990s funded by the Game and Fish Department and Rocky Mountain Elk Foundation proved otherwise.

Turns out, they're Rocky Mountain elk, or the same animals found in the North Dakota badlands and throughout much of the mountainous West.

Casual reading and bit of skepticism in the late 1980s and early 1990s led Bill Jensen, Game and Fish Department big game management biologist, into a hunt for the real identity of an animal that wandered from Canada into the northeastern part of the state.

In the late 1880s, Jensen said, a British hunter spent a year hunting across much of Canada, and possibly parts of the United States. During his stay, the hunter shot a couple of nice bull elk in Manitoba, and then went home where he wrote a paper that described a subspecies based on his observations.

"The hunter's observation got into the scientific literature and stuck," Jensen said. "No one ever checks this stuff because we get lazy … it just kept being perpetuated."

Tissue samples from elk in Manitoba, North Dakota, Utah, Wyoming, California and Minnesota were used in the modern-day genetic work to flesh out the truth. "It's not widely publicized, but a Manitoba subspecies does not exist," Jensen said.

state. Historians say only a handful of elk remained in the state after 1900, with the last known animal shot by a man from Mountrail County.

After a failed attempt in the 1940s to reintroduce elk into the badlands, Jensen said elk were accidentally released in 1977 from a captive herd on Fort Berthold Indian Reservation. The elk established themselves in and around the Killdeer Mountains southwest of the reservation. In the early 1970s, elk wandering in from Canada began appearing in the Pembina Hills near Walhalla.

Unlike bighorn sheep, Canada geese, prairie chickens and some other game species, the Game and Fish Department has never introduced elk into the state, said Randy Kreil, Department wildlife division chief. "The Department realized a long time ago that elk can be a divisive issue and that landowners would react negatively to elk being, for lack of a better word, 'forced' on them through targeted reintroduction," he said. "On the other hand, we have learned from experience that if elk move into an area on their own, landowners are much more tolerant."

KELLY KRABBENHOFT

That being said: "Landowners, wherever there are elk, expect the Department to manage their numbers at such a level that damages and other associated problems are kept within an acceptable level," Kreil said.

Game and Fish field biologists meet on a regular basis with landowners and hunters to determine the appropriate number of elk an area can support without substantial conflict, and license numbers are based on these evaluations.

"What's interesting is the contrast between moose and elk in North Dakota," Kreil said. "Both are large animals, but the difference is that landowners in agricultural areas don't usually mind moose, which is understandable because moose are solitary animals, or have a calf or two around."

Elk, conversely, are herd animals, and a herd of elk running through a sunflower field, as compared to a moose or two, is a different story altogether.

Of North Dakota's two distinct elk populations, the one in the northeast is relatively stable. When elk numbers increase, license numbers follow. When elk numbers decrease, licenses allotted to hunters are reduced. "However, in the southwest, things are a little more complicated," Kreil said. "Elk habitat is more widely distributed, and there are uncontrolled variables. For example, elk cannot be managed by hunting within the South Unit of Theodore Roosevelt National Park."

In the Killdeer Mountains area, state wildlife managers are able to keep the elk population near tolerable levels through managed hunting seasons. But in the area of the South Unit, it's more difficult because cow elk, animals that must be managed to control the population growth, mostly stay within the park where they are off limits to hunters.

Rocky Mountain elk are big animals, but are often difficult to locate in the rugged locales of western and northeastern North Dakota.

While weather, food and water are not limiting factors in an expanding elk population in North Dakota, landowner tolerance and space are. Landowners today are generally more tolerant of elk, but habitat suitable for these big, wild creatures is limited. "Much of North Dakota is not elk habitat anymore because the tolerance for them would be low," Kreil said. "In the mid- to late 1990s, some individuals approached us about turning elk loose along the Missouri River south of Bismarck and we determined that it would be highly irresponsible. There are too many people and too many places for elk to get into trouble, such as irrigated alfalfa and corn fields."

In terms of elk numbers, Kreil said Game and Fish officials don't want any more elk than the public can tolerate. "Elk are like every other species of wildlife that we manage, they're very dynamic," he said. "We'll continue to work with landowners and sportsmen and adjust our management goals and objectives to match increases and decreases in the elk population."

The first limited elk season in North Dakota was held on the Pembina Hills herd in 1982. The harvest goal was five bulls, and the hunting opportunity was presented to moose hunters who could shoot either a moose or a bull elk. No bulls were shot.

"…we have learned from experience that if elk move into an area on their own, landowners are much more tolerant."

The second season in 1983 was set up differently, as five once-in-a-lifetime licenses for bull elk were issued. Tab Johnson of Osnabrock became the first to take an elk in the state's modern-day season. News of Johnson's success caused quite a commotion as was reported in *North Dakota OUTDOORS: "The small Forest Service shop (in Walhalla) being used as a checking station was so crowded that there wasn't room for everyone to get inside. Game and Fish biologists worked in a crowd of curious onlookers as they weighed and dressed the animal … The area near the shop became so congested that the highway patrol had to be called to direct traffic and get vehicles blocking the highway moving again."*

The first hunting season for the badlands elk herd was held in 1984. Twenty-five licenses were issued to hunters who could shoot a cow, calf or bull.

Of all of North Dakota's big game animals, elk in the badlands and Pembina hills provide the biggest challenge. Hunter success in 2004, for example, was 46 percent. That's low, at least when you consider hunter success for deer in 2004 was 74 percent – and that was down 5 percent from 2003. Moose hunters, too, had better luck in 2004 as 86 percent filled their licenses.

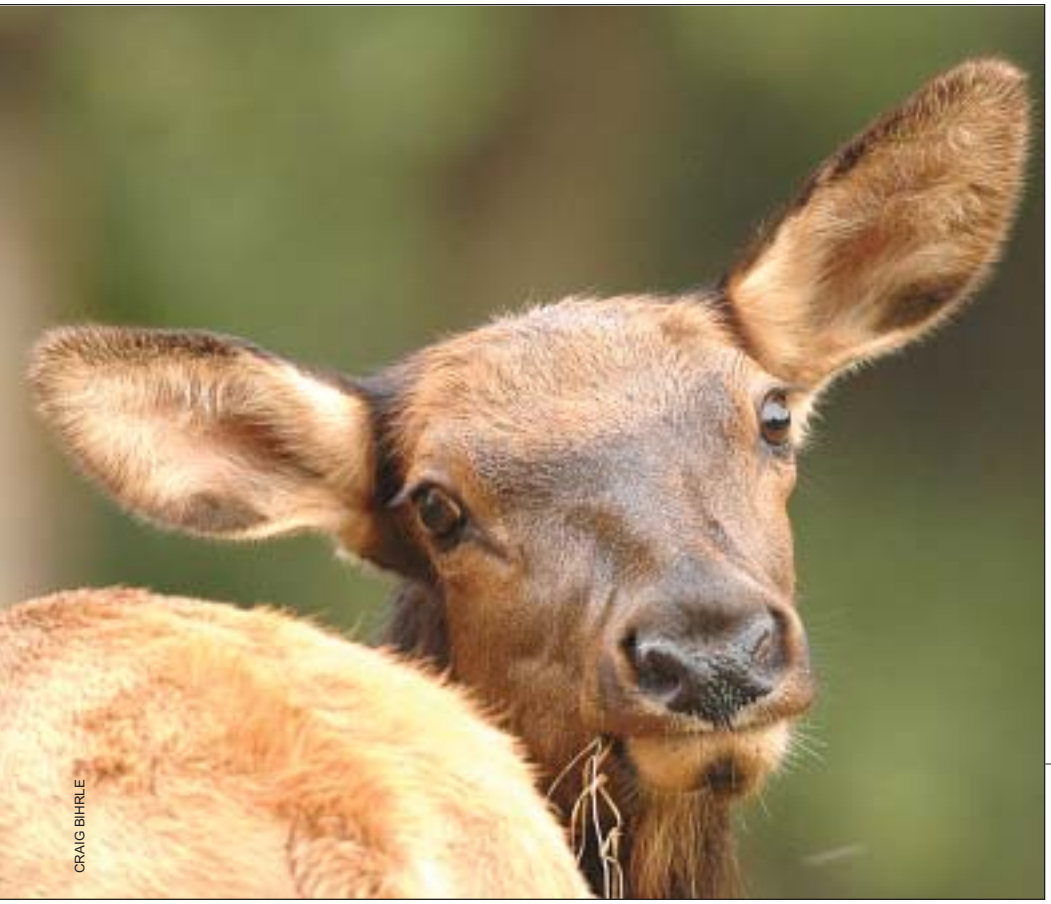
In 2003, Janel Kolar of Dickinson drew an elk license for an August hunt in Unit E4 in the badlands. Unlike some hunters, she knew what she was getting into after having hunted the area – rugged up and down terrain so typical of the badlands – for years for deer. "I knew I would have to be in shape … you can't hunt elk from a vehicle," said Kolar, Department administrative assistant, Dickinson. "I knew it was going to be a rough hunt and we would be doing a lot of hiking. In August when it's hot, those elk tend to hide out in the deepest, darkest, coolest draws they can find."

Escaping 100-degree heat in the badlands in August can be difficult for both hunter and animal. "When it's 90-100 degrees in the badlands, it's like a desert," Kolar said. "One day we ran out of water and I got heat stroke. My husband was scared to death. Just knowing how far from water we were, the sicker I felt."

When it was all behind her – the slow trek to water, days in the field and eventually having to pack out a cow elk more than a mile over tough country in the dark – Kolar hesitates just momentarily when deciding if she'd do it again. "The day after I probably would have told you no," she said. "But it was a real thrill, what a hunt. I got a cow and had no problem shooting a cow. I understand how elusive elk can be, but sometimes you get lucky enough to see one."

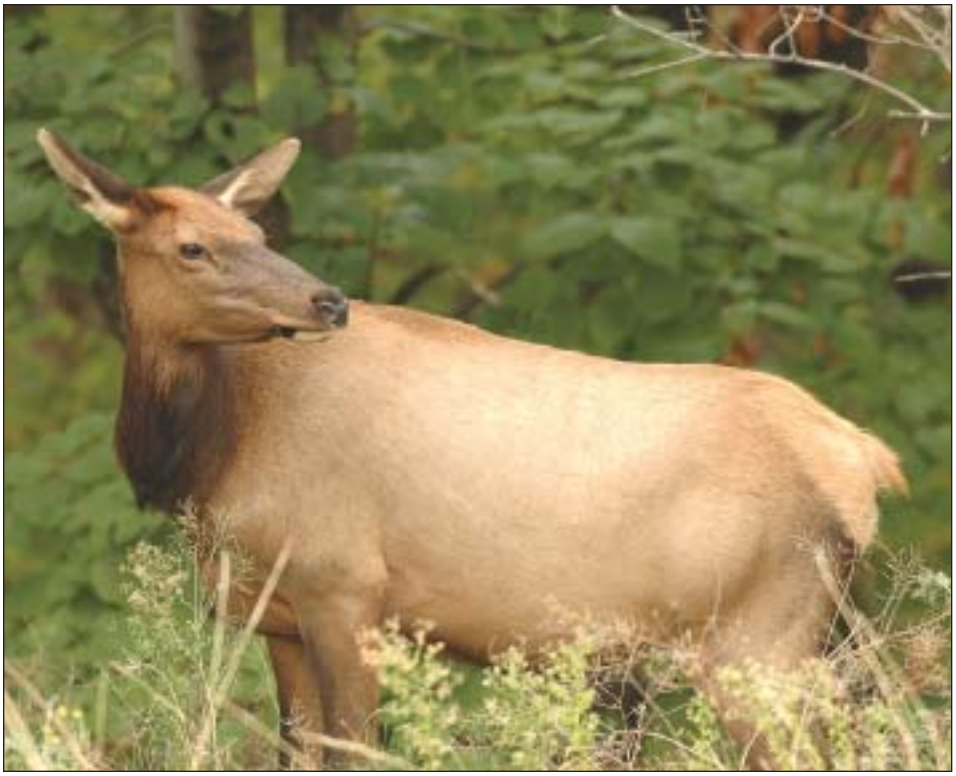
Nothing wrong with catching a break in elk country. "Even if you scout hard, spend several days in the field, do all the things you need to do for an elk hunt in tough country, you still have to have lady luck on your side," Stillings said.

RON WILSON is editor of North Dakota OUTDOORS.



CRAIG BIHRLE

An expanding elk herd in the South Unit of Theodore Roosevelt National Park possibly threatens rangeland and other animals within the park's boundaries.



CRAIG BIHRLE

Elk provide the biggest challenge for big game hunters in North Dakota.

Oehler said when you start seeing skinny elk not having calves, then you have a problem with your range. That's not the case in the South Unit today, but wildlife managers understand the need to do something about the rapidly growing population.

Other Side of the Fence

Elk have done extremely well in the South Unit of Theodore Roosevelt National Park. Too well, it turns out, as park officials are now seeking a method of management for an expanding herd that possibly threatens rangeland and wildlife within the South Unit's boundaries.

"In demographic terms, the elk population at Theodore Roosevelt National Park is among the most successful that have been studied," said Glen Sargeant, research wildlife biologist for the U.S. Geological Survey (USGS) Northern Prairie Wildlife Research Center in Jamestown.

Elk in the South Unit have thrived for several reasons, said Sargeant, who has been researching elk in the park for about five years. "They have plenty of food and space, a very mild environment for elk and good recruitment into the population," he said. "Although park elk may occasionally be killed by predators, we have not documented a single instance. Any losses that may occur clearly aren't sufficient to prevent continued population growth."

Blood tests show that about 55 percent of yearling TRNP female elk are successfully bred during the rut, which is high. According to research elsewhere on Rocky Mountain elk, the percentages range from 0 to 48 percent. For South Unit females older than 2 years, more than 90 percent are successfully bred during the rut.

In 1985, 47 elk from Wind Cave National Park, South Dakota, were released in the South Unit. Two decades later, the herd is significantly larger. Before calving in late spring and early summer 2005, the park's population in southwestern North Dakota was estimated at about 600 animals. The North Unit of TRNP in North Dakota, about 40 miles away, does not have an elk herd.

In the late 1980s, the park conducted research that looked at forage production in the park, dietary requirements of elk, feral horses, bison, and the potential for damage to different plant species. Based on that research, the park established a population objective of no more than 360 elk for the South Unit. The goal, or objective, is not to produce as many elk as you possibly can, but to responsibly manage the range and the other species that depend on it, said Mike Oehler, TRNP wildlife biologist.

Oehler said when you start seeing skinny elk not having calves, then you have a problem with your range. That's not the case in the South Unit today, but wildlife managers understand the need to do something about the rapidly growing population.

Since 2003, 30-40 cow elk have been marked with Global Positioning System collars each year. The collars enable researchers to track their whereabouts and show that some elk leave the park and become fair game for hunters. About 25 percent of the collared animals have ventured outside the park. However, many of those animals spent the majority of their time, year-round, within the park. All of the marked elk have returned to the park during winter.

In 1997, the Game and Fish Department introduced an experimental August elk season to reduce the number of animals moving back and forth from the South Unit to private land. The season was set for late summer because many of the elk return to the park by the time the regular October elk season opens.

"The Game and Fish Department has worked very closely with landowners to arrange the season," a Department official said in 1997. "The proposal was well received by farmers and ranchers in the area and they are looking at hunting as the vehicle for reducing (depredation and damage to fences)."

The August season, which has undergone some modification since 1997, continues today.